

Application No.: 10/058,840

Docket No.: SCEI 3.0-112

IN THE CLAIMS

1. (currently amended) An image processing method, comprising:

retrieving a predetermined data section from data defining a first image, the predetermined data section expresses an edge of the first image and is extracted using Laplacean filtering;

retrieving a coefficient value from a predetermined table using a value of the predetermined data section as an index;

generating a second image by blurring the first image;  
and

synthesizing the first image with the second image depending on the coefficient value.

2. (original) The image processing method according to Claim 1, wherein the predetermined table has a plurality of coefficient values which are gradated.

3. - 4. (canceled).

5. (currently amended) The image processing method according to Claim 1, further comprising determining as the coefficient value a semi-transparent coefficient which defines a larger synthetic ratio of the second image as the value of the predetermined data section increases.

6. (original) The image processing method according to Claim 1, wherein the predetermined data section is one which expresses an edge of the first image.

7. (original) The image processing method according

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to Claim 1, wherein the predetermined data section is one which largely affects the luminance of the first image.

8. (original) The image processing method according to Claim 7, further comprising:

extracting a data section which expresses an edge of the first image from the predetermined data section; and

retrieving the coefficient value from the predetermined table using a value of the extracted data section as the index.

9. (currently amended) The image processing method according to Claim 7, wherein when the data defining the first image includes red component data, green component data and blue component data, the predetermined data section is the green component data.

10. (canceled).

11. (currently amended) An image processing device, comprising:

a data retrieving unit operable to retrieve a predetermined data section from data defining a first image, the predetermined data section including data which expresses an edge of the first image and the data retrieving unit extracting the predetermined data section using Laplacean filtering;

a coefficient retrieving unit operable to retrieve a coefficient value from a predetermined table using a value of the predetermined data section as an index;

a first image processor operable to blur the first image to thereby generate a second image;

and

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a second image processor operable to synthesize the first image with the second image depending on the coefficient value.

12. (original) The image processing device according to Claim 11, wherein the predetermined table has a plurality of coefficient values which are gradated, and the coefficient retrieving unit retrieves the coefficient value using a value of the predetermined data section as the index.

13. - 14. (Canceled).

15. (currently amended) The image processing device according to Claim 11, wherein the coefficient retrieving unit determines as the coefficient value a semi-transparent coefficient which defines a larger synthetic ratio of the second image as the value of the predetermined data section increases.

16. (canceled).

17. (original) The image processing device according to Claim 11, wherein the predetermined data section includes a data section which largely affects the luminance of the first image; and the coefficient retrieving unit retrieves the coefficient value from the predetermined table using as the index a value of the data section which largely affects the luminance of the first image.

18. (currently amended) The image processing device according to Claim 17, wherein the data retrieving unit extracts data expressing an edge of the first image from the data section which largely affects the luminance of the first image; and the

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coefficient retrieving unit retrieves the coefficient value from the predetermined table using as the index the extracted data.

19. (currently amended) The image processing method according to Claim 17, wherein when the data defining the first image includes red component data, green component data and blue component data, the predetermined data section which largely affects the luminance of the first image is the green component data.

20. (canceled).

21. (currently amended) A computer-readable recording medium having recorded therein an image processing program to be executed on a computer, the image processing program comprising:

a program portion retrieving a predetermined data section from data defining a first image, the predetermined data section including data expressing an edge of the first image and being extracted using Laplacean filtering;

a program portion retrieving a coefficient value from a predetermined table using a value of the predetermined data section as an index;

a program portion blurring the first image to thereby generate a second image; and

a program portion synthesizing the first image with the second image depending on the coefficient value.

22. (original) The computer-readable recording medium according to Claim 21, wherein the predetermined table has a plurality of coefficient values which are gradated.

23. - 24. (canceled).

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25. (currently amended) The computer-readable recording medium according to Claim 21, wherein the image processing program further comprises a program portion determining as the coefficient value a semi-transparent coefficient which defines a larger synthetic ratio of the second image as the value of the predetermined data section increases.

26. (original) The computer-readable recording medium according to Claim 21, wherein the predetermined data section is one which expresses an edge of the first image.

27. (original) The computer-readable recording medium according to Claim 21, wherein the predetermined data section is one which largely affects the luminance of the first image.

28. (cancelled).

29. (currently amended) The computer-readable recording medium according to Claim 27, wherein when the data defining the first image includes red component data, green component data and blue component data, the predetermined data section is the green component data.

30. (canceled).

31. (currently amended) A program execution device for executing an image processing program stored in the device, wherein the programmed device performs the following steps:

retrieving a predetermined data section from data defining a first image, the predetermined data section expressing an edge of the first image and being extracted using Laplacean filtering;

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retrieving a coefficient value from a predetermined table using a value of the predetermined data section as an index;

blurring the first image to thereby generate a second image; and

synthesizing the first image with the second image depending on the coefficient value.

32. (original) The program execution device according to Claim 31, wherein the predetermined table has a plurality of coefficient values which are gradated.

33. - 34. (canceled).

35. (currently amended) The program execution device according to Claim 31, wherein the programmed device further performs the step of determining as the coefficient value a semi-transparent coefficient which defines a larger synthetic ratio of the second image as the value of the predetermined data section increases.

36. (canceled).

37. (original) The program execution device according to Claim 31, wherein the predetermined data section is one which largely affects the luminance of the first image.

38. (currently amended) The program execution device according to Claim 37, wherein the following further steps are performed by the programmed device:

extracting a data section which expresses an edge of the first image from the predetermined data section; and

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retrieving the coefficient value from the predetermined table using a value of the extracted data section as the index.

39. (original) The program execution device according to Claim 37, wherein when the data composing the first image includes red component data, green component data and blue component data, the predetermined data section is the green component data.

40. (canceled).

41. (currently amended) An image processing program stored in a computer to be executed by the computer, comprising:

a program portion retrieving a predetermined data section from data defining a first image, the predetermined data section expressing an edge of the first image and being extracted using Laplacean filtering;

a program portion retrieving a coefficient value from a predetermined table using a value of the predetermined data section as an index;

a program portion blurring the first image to thereby generate a second image;

and

a program portion synthesizing the first image with the second image depending on the coefficient value.

42. (canceled).

43. (previously presented) A method for processing an image, comprising:

maintaining a first data structure including a first field containing a value of a luminance attribute for

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pixel types included in the image and a second field which is gradated for successive pixel types;

producing a second data structure associating the respective luminance attribute values with pixels in the image;

weighting at least one of the luminance attribute values in the second data structure with the respective value in the gradated field of the first data structure to produce a weighted second data structure; and

synthesizing the image with a blurred version of the image using the weighted second data structure as a weighting factor for pixels of the image or the blurred image, the resulting synthesized image having reduced edge aliasing compared to the image.

44. (previously presented) The method of claim 43 wherein, prior to the synthesizing step at least one luminance attribute value in the second data structure is filtered to emphasize pixel-to-pixel differences.

45. (previously presented) The method of claim 44 wherein the luminance attribute value is filtered using Laplacean filtering.



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2. (original) The image processing method according to Claim 1, wherein the predetermined table has a plurality of coefficient values which are gradated.

3. - 4. (canceled).

5. (currently amended) The image processing method according to Claim 1, further comprising determining as the coefficient value a semi-transparent coefficient which defines a larger synthetic ratio of the second image as the value of the predetermined data section increases.

6. (original) The image processing method according to Claim 1, wherein the predetermined data section is one which expresses an edge of the first image.

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to Claim 1, wherein the predetermined data section is one which largely affects the luminance of the first image.

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9. (currently amended) The image processing method according to Claim 7, wherein when the data defining the first image includes red component data, green component data and blue component data, the predetermined data section is the green component data.

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11. (currently amended) An image processing device, comprising:

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a second image processor operable to synthesize the first image with the second image depending on the coefficient value.

12. (original) The image processing device according to Claim 11, wherein the predetermined table has a plurality of coefficient values which are gradated, and the coefficient retrieving unit retrieves the coefficient value using a value of the predetermined data section as the index.

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15. (currently amended) The image processing device according to Claim 11, wherein the coefficient retrieving unit determines as the coefficient value a semi-transparent coefficient which defines a larger synthetic ratio of the second image as the value of the predetermined data section increases.

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17. (original) The image processing device according to Claim 11, wherein the predetermined data section includes a data section which largely affects the luminance of the first image; and the coefficient retrieving unit retrieves the coefficient value from the predetermined table using as the index a value of the data section which largely affects the luminance of the first image.

18. (currently amended) The image processing device according to Claim 17, wherein the data retrieving unit extracts data expressing an edge of the first image from the data section which largely affects the luminance of the first image; and the

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coefficient retrieving unit retrieves the coefficient value from the predetermined table using as the index the extracted data.

19. (currently amended) The image processing method according to Claim 17, wherein when the data defining the first image includes red component data, green component data and blue component data, the predetermined data section which largely affects the luminance of the first image is the green component data.

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a program portion synthesizing the first image with the second image depending on the coefficient value.

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43. (previously presented) A method for processing an image, comprising:

maintaining a first data structure including a first field containing a value of a luminance attribute for

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pixel types included in the image and a second field which is gradated for successive pixel types;

producing a second data structure associating the respective luminance attribute values with pixels in the image;

weighting at least one of the luminance attribute values in the second data structure with the respective value in the gradated field of the first data structure to produce a weighted second data structure; and

synthesizing the image with a blurred version of the image using the weighted second data structure as a weighting factor for pixels of the image or the blurred image, the resulting synthesized image having reduced edge aliasing compared to the image.

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